















# Solar Statement

As representatives of organisations working on energy and environmental issues, we call on the British government to commit to an ambitious target for the deployment of solar energy in the UK. Solar can deliver for both nature and net zero, and help the UK achieve a green economic recovery from Covid-19.

#### Solar is essential to deliver net zero

Solar is one of the most affordable, efficient, and popular zero carbon electricity generation technologies available. More than 86% of people support its use, according to the Government's Department for Business, Energy & Industrial Strategy.¹ Despite the impacts of Coronavirus and the national lockdowns, solar energy continued to make history in the UK throughout 2020. This included:

- Contributing to a record coal-free period of power generation, of more than two months.
- Hitting a new all-time peak generation record of 9.68GW, in April.
- Meeting more than 11% of total UK electricity demand in May.
- New figures show 545MW of new solar capacity was installed in 2020, an increase of 27% from 2019.

With around 14GW of solar capacity installed at present in the UK, there remains major potential for additional capacity. The Committee on Climate change has suggested the deployment of 54GW of solar energy by 2035 is necessary to help the UK meet its net zero carbon emissions goal,<sup>2</sup> while the National Infrastructure Commission has suggested the UK will need roughly 38GW by 2030.3 The UK solar industry is calling on the Government to commit to a deployment target of 40GW by 2030, a figure we endorse, as a minimum.

## Solar supports natural capital and nature recovery

As well as reducing carbon emissions and so addressing global climate change, solar energy can deliver significant local environmental benefits. Well-designed solar parks have been shown to support increased biodiversity and contribute to natural capital benefits, including improved air quality, flood attenuation and improved water quality, soil regulation, and sustainable agricultural practices.<sup>4</sup> For example, vegetation and planting carried out as part of installation can help create a range of habitats, including hedgerows, ponds, and

<sup>&</sup>lt;sup>1</sup> BEIS <u>Public Attitudes Tracker Wave 33: key findings (publishing.service.gov.uk)</u>

<sup>&</sup>lt;sup>2</sup> https://<u>www.theccc.org.uk/wp-content/uploads/2019/05/CCC-Accelerated-Electrification-Vivid-Economics-</u>

<sup>&</sup>lt;sup>3</sup> https://www.nic.org.uk/wp-content/uploads/Final-Renewables-Recovery-Reaching-Net-Zero.pdf

<sup>4</sup> https://www.solar-trade.org.uk/wp-content/uploads/2019/06/The-Natural-Capital-Value-of-Solar.pdf

wildflower meadows, as well as grazing for animals. Every solar park is different, offering the opportunity to focus on different aspects of biodiversity across a network of local sites. Because drainage and on-site water management are key considerations when planning a solar development, works carried out as part of installation can also support stable water management systems. Open draining structures such as swales and balancing ponds can provide rich wetland habitats, which are in decline around the UK.

## Solar supports good jobs and a green economy

The solar sector creates high-quality environmental jobs and can help the UK deliver a green economic recovery from Covid-19. The solar supply chain includes businesses working in environmental research and consulting, land and biodiversity management, and sustainability planning, as well as the broader technical, engineering, and commercial roles. With the cost of solar and energy storage around the world having seen a huge decline in the last decade – and continuing to decrease<sup>5</sup> – the UK solar industry is optimistic for its post-subsidy future. Government support for the policy reforms outlined below would help ensure the potential of the industry is realised. This would also create employment. For example, there are 13 GW of ground-mounted solar projects in the UK pipeline, which industry research suggests could deliver nearly 7,500 jobs.<sup>6</sup>

Furthermore, the distributed nature of onsite generation means these jobs will be delivered across the whole of the UK. This means there is potential, for example, for solar parks and associated energy storage, to provide high-skilled employment in rural areas which may not be traditionally associated with the energy and technology sector. The potential for local employment around the country — in the supply chain, operations and maintenance, and project management associated with solar energy — is also significant. Solar can therefore directly support the Government's plans to deliver a Green Industrial Revolution which enables economic development across the UK's regions. Its integration into smart grid management provides a genuine opportunity to be world leaders in this field. Most countries will be using decentralised solar extensively in their smart grid arrangements and the absence of such solar deployment in the UK risks limiting the applicability of learning and systems developed here.

# Community energy is key

Community energy harnesses local passion, knowledge and capital to develop local energy solutions - the vast majority being solar to power local buildings - which also deliver 12-13 times the social and community benefit of commercial installations<sup>7</sup>. These projects not only deliver kilowatts but also local energy and climate awareness and engagement, without which the Committee on Climate Change is clear we will fail to achieve net zero<sup>8</sup>. The sector doubled in size every year between 2014 and 2017 but the removal of virtually all support for community energy over the last 5 years means that community groups struggle to make a business case to get active locally in support of the net zero transition.<sup>9</sup> The government has recognised that it cannot meet its net zero targets without ongoing support for onshore renewables. The same applies to community energy. The sector is hugely motivated and tenacious and, with some government support, is ready to scale to deliver enough electricity to power 2.2m homes, 8700 jobs, save 2.5m t CO2 and add £1.8bn to the economy by 2030<sup>10</sup>, as well as secure the consent and involvement of people and communities.

#### **Recommendations for Government**

We recommend the following priority policies to support the deployment of solar energy and storage in the UK, and deliver on the Government's ambitions for net zero and a green recovery:

<sup>&</sup>lt;sup>5</sup> https://about.bnef.com/blog/scale-up-of-solar-and-wind-puts-existing-coal-gas-at-risk/

<sup>&</sup>lt;sup>6</sup> At 0.57 FTE per MW. See <a href="https://www.solar-trade.org.uk/wp-content/uploads/2020/06/STA-Policy-Paper-Priorities-for-a-Renewable-Recovery-Package-June-2020.pdf">https://www.solar-trade.org.uk/wp-content/uploads/2020/06/STA-Policy-Paper-Priorities-for-a-Renewable-Recovery-Package-June-2020.pdf</a>

<sup>&</sup>lt;sup>7</sup> <u>https://www.gov.uk/government/publications/community-renewable-electricity-generation-potential-sector-growth-to-2020</u>

https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/

<sup>&</sup>lt;sup>9</sup> https://communityenergyengland.org/pages/state-of-the-sector

<sup>&</sup>lt;sup>10</sup> https://communityenergyengland.org/pages/2030-vision

- Set a minimum target for the deployment of solar energy in the UK. This should be in line with independent
  assessments of how much solar is needed to help the UK meet its net zero aims. Industry body, Solar Energy
  UK, says it is possible to deploy 40 GW of solar energy by 2030, which we endorse and suggest should be
  the minimum target.
- Develop a solar sector skills, financing, and training deal to support this deployment, in line with
  government support for other renewable generation technologies, such as offshore wind. The sector deal
  should include detailed planning to develop the skilled supply chain which supports the solar and energy
  storage industry and can help provide a green economic recovery.
- Recognise that solar is the most attractive technology that can operate at a community scale, and that its
  deployment is valuable both in illustrating and engaging people in the energy transition
- Implement the following priority policy reforms to support solar deployment at all scales:

### Residential rooftop solar and storage:

- Extend the means-tested element of the Green Homes Grant scheme to make solar and energy storage
  eligible. This will allow low income households, with no access to capital, including social housing
  tenants, the opportunity to use the full range of zero-carbon retrofitting options. The implementation
  of the scheme also needs improving and extending for the rest of the Parliament.
- Solar energy and storage technologies should be zero-rated for VAT.
- Implement the recommendation of the Green Finance Institute for the new National Infrastructure Bank to provide capital support for 0% interest loans to homeowners to install green retrofits, including solar energy, zero carbon heating, insulation measures and energy storage.<sup>11</sup>
- Provide explicit support for community energy programmes, like most other EU countries for example, the Netherlands, where a feed-in-tariff of 14.6c p kWh has been implemented. Community energy should be included in support for onshore renewables. The Urban Community Energy Fund should be reinstated alongside grants for local energy collaborations with Local Authorities.

# Commercial rooftop solar:

- Class onsite generation and storage assets such as solar PV and batteries as 'excepted plant and machinery' under Class 1 in the business rates regulations (SI2000/540). This would bring them into line with gas-fired CHP.
- Build on the MHCLG January 2020 announcement of the 31% energy efficiency improvement which will be required of new homes from 2022, and ensure that the standards for non-domestic buildings are equally ambitious, as a minimum.

#### **Utility scale solar:**

- Set a capacity target of 5GW of solar power to be delivered through annual Contract for Difference (CfD) auctions to be held before the end of the current parliament, and guarantee solar's inclusion in a long-term CfD mechanism. This should be an expansion of any nominal target for renewable capacity deployment in these auctions, and not at the expense of e.g. onshore or offshore wind deployment because of such a capacity cap
- Ensure that dual-use farmland with solar PV installed on it is eligible to participate in the Environmental Land Management Scheme.

## Public sector solar:

• Extend the Public Sector Decarbonisation Scheme to the end of the current parliament, and set a target of ensuring that 100% of the supply of electricity to the Government's Civil Estate by 2030 is met through procuring additional renewable energy generation capacity by 2030.

<sup>&</sup>lt;sup>11</sup> REPORT (greenfinanceinstitute.co.uk)